

QMS Challenges & Industry Trends

NASA – Supply Chain 2012



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President NQA, USA

National Quality Assurance...
trusted worldwide.



*Complete Standards Coverage
Global Registration Services
Experienced Audit Teams
Seamless Partnerships
Cost-Effective Services*

*Registration
Services to these
Standards:*

ISO 9001:2008

TS 16949

AS9100

AS9110

AS9120

TL 9000

ISO14001

OHSAS 18000

ISO13485

ESD 20.20

PS-Prep

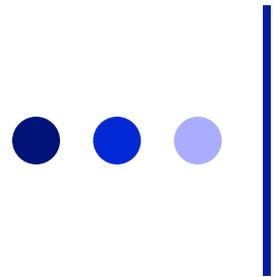
ISO 27000

ISO 20000

ISO 22000



- Strategic Environment for Quality
 - 9100c Transition
 - Future of AS9100
- Industry Issues & Trends
 - Business Continuity
 - Security In the Supply Chain
 - QMS Controls In the Supply Chain
- Emerging Policies Impacting QMS
 - Sequestration & Lean QMS



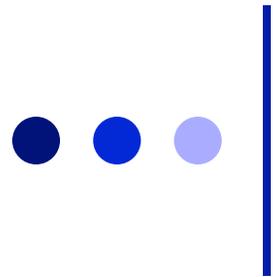
AS9100c Transition

○ Challenge

- Transition 15,000 Companies Worldwide
- Upgrade Global Aerospace Auditor Skill sets
- Company Focus on Process Effectiveness

○ Current Results

- AATT Auditor Training & Testing (~600 Auditors)
- Organization 'Transition Guidance' to Assist Stakeholders with Transition
- 95% of Global Organizations on Track to Meet 1/1/13 Deadline
 - 5 NASA Centers Transitioned
 - Most all of the Space Industry Suppliers
- Increasing Understanding of the Process Effectiveness (PEARs)
- Increased Awareness of Risk Focus With QMS Processes
 - Still a ways to go



Future of AS9100

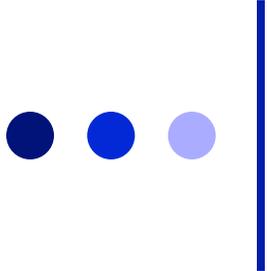
○ AS9100 Evolution

● Reason For Change

- Standards Revision Every 5 Years (~2015)
- Keep Aligned with ISO 9001 Changes (ECD 2015)
- Ensure Standard Keeps Pace with Industry Needs

● Pace Of Change

- ~3 Years to Complete & Globally Harmonize
- Opportunity to Influence
- Survey out ~3-5 Months



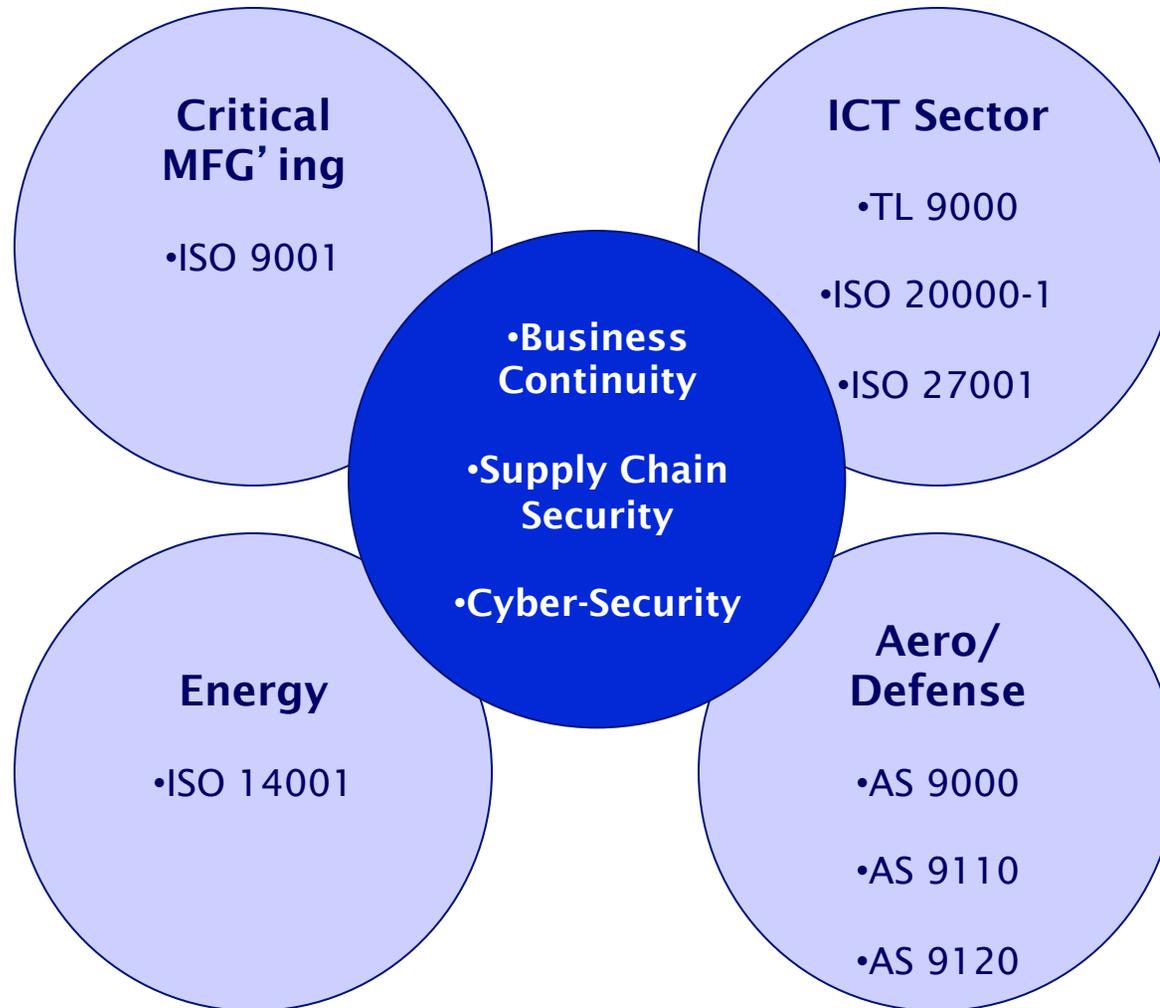
Industry Issues & Trends

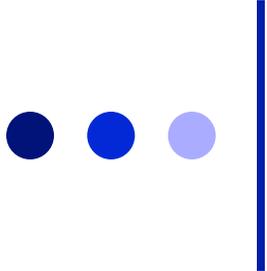
Supply Chain Resilience Ecosystem

- QMS has Historically Focused on Meeting Customer Needs thru Product Process Integrity
- Additional Challenges Emerging in Customer – Supplier Value Stream
 - Continuity & Security
- New Standards Progressing to Supplement the Traditional QMS Base Standards

Industry Issues & Trends

Supply Chain Resilience Ecosystem





Dept. Homeland Security PS-Prep

- Business Continuity/Supply Chain Resilience
 - Dept of Homeland Defense Driven Security Initiative – Outcome of 9/11 Commission
 - Address government-driven topics of risk, security and business continuity
 - Leverage existing industry positions
 - DHS Sponsored Certification to PS-Prep through ANAB/Certification Body Infrastructure

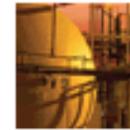
Critical Infrastructure Sectors



[Agriculture and Food](#)



[Banking and Finance](#)



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[Commercial Facilities](#)



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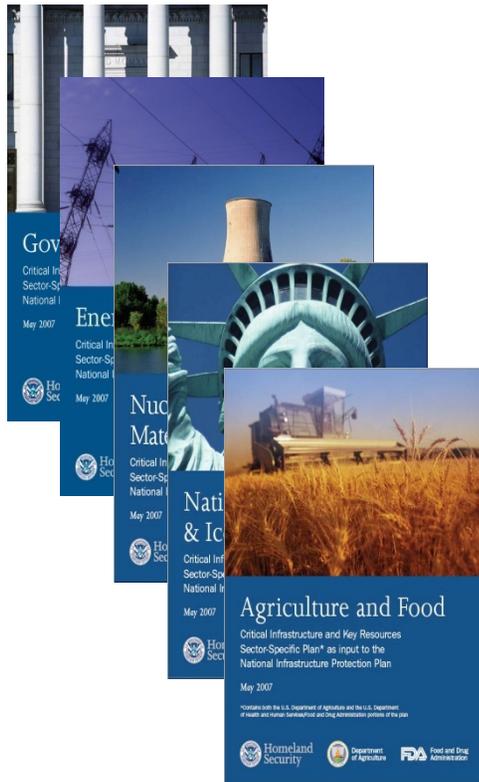


[Transportation Systems](#)



[Water](#)

Sector Specific Plans (SSP's)



- Each CIKR (Critical Infrastructure & Key Resources) has DHS Sponsored Planning Document
- Provides Insight to Industry Unique Characteristics and Risk Landscapes
- Creates Focus For Continuity and Resilience Efforts



Industry Trends

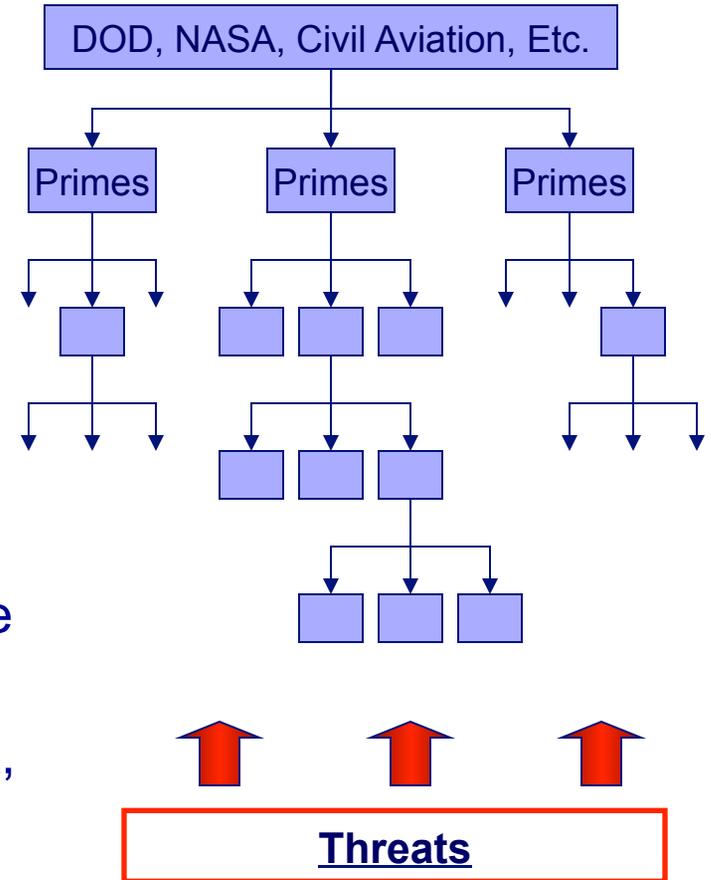
- Supply Chain Security -

● Challenge

- Product & Service Threats Entering the Supply Chain
- Counterfeit, Intellectual Property, ITAR, Loss Management, etc.

● Solutions

- ISO 27000 (Information Security)
- ISO 28000 (Supply Chain Security)
- AS5553/AS6081 (Counterfeit Parts)





Industry Trends

- Enhanced QMS Controls in Supply Chain
 - Challenge
 - Control of an Ever Extending Supply Chain
 - Solutions
 - Supply Chain Risk Control
 - Subtier Supplier Control
 - Specific Product Process Areas of Focus
 - Notification of Design Change, PPAP, etc.
 - Counterfeit Parts



Industry Challenges

- QMS Adequacy During Lean Budgets -

● Challenge

- Future Outlook for Declining Government Spending
- Maintaining an Effective QMS in a Lean Environment

● Areas of Focus

- More with Less (More with No More)
 - Can Put Pressure on Decisions Points Within QMS
- Maintaining Appropriate Balance Within QMS Structure
 - Justifiable Risk -vs- Risk Mitigation
 - Inspection, V&V, IV&V, Etc.
 - Insight -vs- Oversight
 - Maintain Focus On People Competencies



Cost

Sched.

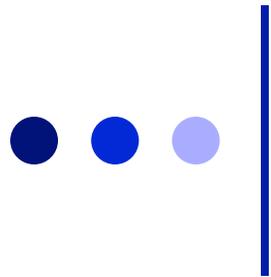
Risk



Processes

Competency

Decisions



In Closing

- Evolving Industry Business Models Ever Changing
- Driving Evolution in Management Systems
 - Quality
 - Safety
 - Security
 - Continuity
- Organizations Must Focus on New Challenges and Adapt Their Management Systems to Remain Robust & Viable.